

Appln. No.: 10/663,534
Amendment Dated March 6, 2007
Reply to Office Action of December 08, 2006

MATI-224US

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Remarks/Arguments:

Claims 1-20 are pending.

Claims 1-6 and 11-20 are rejected.

Claims 7-10 are indicated to be allowable if properly re-written in independent form.

By this Amendment, claims 1-4, 6-10, 14 and 17-20 are amended and claims 11-13 are cancelled without prejudice.

No new matter is presented by the claim amendments. Support for the claim amendments can be found throughout the original specification and, more particularly, in original claim 7.

Rejection of Claims 4, 13 and 18 under 35 U.S.C. §112, second paragraph.

In the Office Action, at item 1, claims 4, 13 and 18 are rejected under 35 U.S.C. §112 second paragraph, as being indefinite.

Claim 13 has been cancelled. Accordingly, the rejection of claim 13 is now moot.

Claims 4 and 18 have been amended. It is submitted that claims 4 and 18 are not subject to rejection under 35 U.S.C. §112, second paragraph.

Reconsideration is respectfully requested.

Rejection of Claims 4, 13 and 18 under 35 U.S.C. §101.

In the Office Action, at item 2, claims 4, 13 and 18 are rejected under 35 U.S.C. §101 because the claimed recitation is of a use, without setting forth any steps involved in the process.

Claim 13 has been cancelled. Accordingly, the rejection of claim 13 is now moot.

Claims 4 and 18 have been amended. Amended claims 4 and 18 include the recitation of "periodically updating." It is submitted that claims 4 and 18 are not subject to rejection under 35 U.S.C. §101.

Reconsideration is respectfully requested.

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Rejection of Claims 19 and 20 under 35 U.S.C. §101.

In the Office Action, at item 3, claims 19 and 20 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

Claims 19 and 20 have been amended to recite a "physical computer readable carrier." It is submitted that claims 19 and 20 are also not subject to rejection under 35 U.S.C. §101.

Reconsideration is respectfully requested.

Rejection of Claims 1-3, 5-6, 11-12, and 14-17 under 35 U.S.C. §103(a).

In the Office Action, at item 4, claims 1-3, 5-6, 11-12 and 14-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (U.S. Patent No. 6,982,960, hereafter referred to as Lee) in view of Garcia-Luna-Aceves et al. (U.S. Patent No. 7,046,639 hereafter referred to as Garcia).

Although the Examiner indicates that claims 1-3, 5-6, 11-12, and 14-17 are rejected over Lee in view of Garcia, the body of the rejection also addresses claims 19 and 20 therein. Accordingly, applicants will address claims 19 and 20 in this rejection.

Reconsideration is respectfully requested.

Applicants have amended claim 1 to incorporate features similar to certain features found in original claim 7, (the Examiner having indicated claim 7 to be allowable if properly re-written in independent form).

That is, claim 1 which is directed to a data communication method, recites:

processing a data message for transmission from one of the plurality of wireless devices to the access point, the one of the plurality of wireless devices populating an original source address and an immediate transmitter address of the data message with a source address corresponding to the one of the plurality of wireless devices and populating an immediate recipient address of the data message with an upstream neighbor address corresponding to an immediate upstream neighboring wireless device.

Lee Reference

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Lee discloses a method of self-organizing a network of wireless devices. The network includes a root node. (See Fig. 8 of Lee.) Lee further discloses that a range list RL(k) 320 contains information about nodes in the network including the depth of each neighbor from a root node of the network, neighbor child information and the parent node of each neighbor. (See Lee at col. 3, lines 48-54.) Moreover, Lee discloses that a message 1630 from source node 1610 sent to destination node 1620 is transferred from node to node so that each successive transfer brings the message one hop closer to Root node N(R) 350. (See Lee at col. 10, lines 38-42.) Lee, however, is silent regarding "one of the plurality of wireless devices populating an original source address and immediate transmitter address of the data message with a source address corresponding to one of the plurality of wireless devices and populating an immediate recipient address of the data message with an upstream neighbor address corresponding to an immediate upstream neighbor wireless device", as required by claim 1. This is because, Lee merely discloses the addition of network nodes to the range list but does not discuss anything related to information of a data message. (See, for example, Lee at claim 1.) Moreover, Lee is silent regarding populating such data messages.

Garcia Reference

Garcia does not overcome the deficiencies of Lee. This is because, Garcia does not disclose or suggest the recitation in claim 1 of:

one of the plurality of wireless devices populating an original source address and an immediate transmitter address of the data message with a source address corresponding to the one of the plurality of wireless devices and populating an immediate recipient address of the data message with an upstream neighbor address corresponding to an immediate upstream neighbor wireless device.

Garcia, which is used by the Examiner to teach a central node that is used as an access point, is silent regarding anything related to such a populating feature (i.e., populating an original source address and an immediate transmitter address of the data message with a source

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address corresponding to the one of the plurality of wireless devices and populating an immediate recipient of the data message with an upstream neighbor address corresponding to an immediate upstream neighboring wireless device). Instead, Garcia is concerned with contention-free channel access based on time-slots that are organized into part numbers. Each node is given a ring number according to its location within the network topology and maintains local network information along with its own part number and message digest. (See the Abstract of Garcia.) Thus, the Garcia protocol provides collision-free data transmission without impromptu handshakes or contention phases to allow channel access and time-slot reservations. Contentions for a time-slot are resolved by a synchronized random-permutation-algorithm that produces priorities of each node for transmission. (See Garcia at col. 17, line 61 to col. 18, line 1.)

Accordingly, it is submitted that claim 1 patentably distinguishes over the cited art of Lee in view of Garcia for at least the above mentioned reasons.

Claims 14, 17 and 19

Claims 14, 17 and 19, which include similar but not identical features to those of claim 1, are submitted to patentably distinguish over Lee in view of Garcia for at least similar reasons to those of claim 1.

Claims 2-3, 5-6, 11-12, 15-17 and 20

Claims 2-3, 5-6, 11-12, 15-17 and 20, which include all of the limitations of their respective independent claims, are also submitted to patentably distinguish over Lee in view of Garcia for at least the same reasons as claim 1, claim 14, claim 17 or claim 19.

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Rejection of Claims 4, 13 and 18 under 35 U.S.C. §103(a)

In the Office Action, at item 5, claims 4, 13 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Garcia and further in view of Kulikov et al. (U.S. Patent Publication No. 2002/0122410, hereafter referred to as Kulikov).

Reconsideration is respectfully requested.

Claim 13 has been cancelled. Accordingly, the rejection of claim 13 is now moot.

Claims 4 and 18, which include all the limitations of claim 1 or claim 17, are submitted to patentably distinguish over Lee in view of Garcia for at least the same reasons as claim 1 or claim 17.

It is submitted that Kulikov does not overcome the deficiencies of Lee in view of Garcia. This is because, Kulikov, which is used by the Examiner to teach neighboring tables being updated by data-link layer protocol, does not disclose or suggest the populating feature of claims 1 or 17. Instead, Kulikov merely discloses that messages can be transferred transparently for applications both locally or remotely. The transport system automatically defines a possible message delivery way to the addressee. (See Kulikov at paragraph [0220].) That is, Kulikov is silent regarding such features as populating an original source address and an immediate transmitter address of the data message with a source address corresponding to the one of the plurality of wireless devices and, furthermore, populating an immediate recipient address of the data message with an upstream neighbor address corresponding to an immediate upstream neighboring wireless device. This is because, for example, Kulikov does not discuss upstream neighboring wireless devices.

Accordingly, it is submitted that claims 4 and 18, which include all of the limitations of claim 1 or 17, patentably distinguish over Lee in view of Garcia in further view of Kulikov for the same reasons as claim 1 or claim 17.

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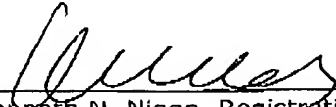
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Conclusion

In view of the claim amendments and remarks, Applicants submit the application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,


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KNN/EB/crj/pb

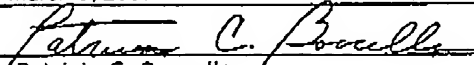
Dated: March 6, 2007

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March 6, 2007


Patricia C. Boccella